UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,753	06/15/2000	Michael D. Christensen	016295.0597 (DC-02236)	3254

7590 12/23/2004	EXAMINER
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	ART UNIT	PAPER NUMBER
910 Louisiana	2132	

Houston, TX 77002-4995

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *8/06/2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's amendment of claim 15 reflects " the host bridge number associated with one of a plurality of host bridges". This limitation is addressed in the rejections herein.

2.   Referring to claims 1-13, Applicant argues that Rekeita, discloses only a single host bridge and not at least two host bridges, as generally recited in the independent claim 1. Examiner points out that claim 1 does not recite "at least two host bridges" but only recites "at least two ... bootable devices". If Applicant's invention includes at least two devices with at least two host bridges, these features need to be adequately reflected in the claims. Furthermore two bridges are disclosed in Fig.1 of Rekeita (see host bridge and PCI bridge, which serves as a host bridge to PCI devices within block 44).

3.   Referring to claims 1-13, 15-18 and 20 Applicant argues the combination of Rekeita and Kondou. Applicant states that Kondou does not teach storing the ID of the bridge, but rather discloses storing an ID of the bridge manager. Examiner points out that the bridge manager of Kondou is an integral part of the bridge itself as shown in Fig. 2. Therefore, one of ordinary skill in the art would have been motivated to modify the computer system comprising the host bridge with bootable devices and the computer readable medium by storing on it the bridge identification data as taught in Kondou for setting the portal (OWNER EUI register) and configuration of the network (see Kondou, abstract and column 12, lines 54-58).

4.   Referring to claims 8-14, Applicant argues that the limitation of the independent

claims 8 reciting "creating an identifier for each bootable device from the host bridge

number and the identification data read from each bootable device" is not adequately

met by teachings of prior art. Examiner points out that in view of broad but reasonable

interpretation of the claim limitation "creating an identifier for each bootable device from

the host bridge number and the identification data read from each bootable device", one

of ordinary skill in the art would have equated configuration information comprising the

subsystem ID and subsystem vendor ID of the PCI device (see Rekeita abstract and

Figs. 1 and 5) with the "bridge number and the identification data read from each

bootable device".

5.   Referring to claims 15-18 and 20, Applicant argues that neither of references teach

a plurality of host bridges. Examiner respectfully disagrees and points out that two

different bridges are disclose by Rekeita (see Fig.1).

6.   Referring to the independent claims 14 and 19, separately rejected by Rekeita in

view of Kondou and further in view of Adamson, Applicant limits his arguments to the

combination of Rekeita and Kondou, which are addressed above.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1-13, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Rekeita (U.S. Patent No. 6.189.063 B1) in view of Kondou (U.S.

Patent No. 6.519.671 B1).

9.   Referring to the instant claims, Rekeita discloses a method and apparatus for

intelligent configuration register access on a PCI to PCI bridge (see abstract).

        Rekeita teaches an apparatus for intelligent configuration register access on a PCI

to PCI bridge (38) are provided. A read to configuration information of a connected PCI

device (30) is identified. It is then determined whether the connected PCI device (30) is

one for which the read should be trapped. If the read should not be trapped, the read is

passed on to the connected PCI device (30). If the read should be trapped, the type of

PCI device is determined for the connected PCI device (30). Data is then returned

representing the configuration information in a format appropriate for the type of PCI

device. In one aspect, the configuration information comprises the subsystem ID and

subsystem vendor ID of the PCI device (see abstract and Figs. 1 and 5).

10.   Referring to claims, the limitation "at least two installed bootable devices and

respective host bridges " is met by units 30, 22 and 38 in Fig. 1. The limitation "a

computer readable medium storing identification data for each of the installed bootable

devices" is met by unit 18 (in Fig. 1).   While Rekeita teaches that the configuration

information comprises the subsystem ID and subsystem vendor ID of the PCI device, he

does not explicitly teach that host bridge identification data is stored on the computer

readable medium. Referring to the instant claims, Kondou teaches the application of

the network bridges (see Fig.2). Kondou teaches a register for storing the equipment ID

of the bridge (see column 12, lines 54-58). Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the computer system of Rekeita comprising the host bridge with bootable devices and the computer readable medium by storing on it the bridge identification data as taught in Kondou. One of ordinary skill in the art would have been motivated to modify the computer system comprising the host bridge with bootable devices and the computer readable medium by storing on it the bridge identification data as taught in Kondou for setting the portal (OWNER EUI register) and configuration of the network (see Kondou, abstract and column 12, lines 54-58).

11.   Referring to claim 2, Rekeita teaches that installed bootable devices are PCI devices (see Fig. 1, units 30).

12.   Referring to claims 3, 4 and 7, Rekeita teaches that identification data comprises vendor ID and device ID (see abstract and Fig 4A).

13.   Referring to claim 5, BMC (unit 31 in Fig. 2 of Kondou) represents the bootable device coupled to a bridge (51). BMC has RAM and ROM, which are parts of the BIOS. BMC accesses the identification data of the bridge stored in portals (41 and 42).

14.   Referring to claims 6,12,13,16 and 20, with regard to the limitation " set up routine operable to display the installed bootable devices", it is well known in the art to use the routine for displaying the installed bootable devices. For example it is used in Microsoft OS for displaying all of the external devices connected to the PC. One of ordinary skill in the art would have been motivated to display the installed bootable devices for monitoring the system.

15.   Referring to claim 8, 9, 10, 11, 15,17 and 18, the limitations "...host bridge

number is associated with one of a plurality of host bridges" and "creating an identifier

for each bootable device from the host bridge number and the identification data read

from each bootable device" are met by configuration information comprising the

subsystem ID and subsystem vendor ID of the PCI device (see Rekeita abstract and

Figs. 1 and 5).

16.   Claims 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Rekeita (U.S. Patent No. 6.189.063 B1) in view of Kondou (U.S. Patent No.

6.519.671 B1) and further in view of Adamson (U.S. Patent No. 5.761.448).

17.   Referring to the instant claims, Rekeita and Kondou teach the creating the

identifier for each bootable device from the host bridge number and the identification

data of the bootable device. Rekeita and Kondou, however do not teach comparing the

bus number and the device number associated with each bootable device to the values

associated with the slot. Referring to the instant claims, Adamson teaches creating a

bus mapping table including a field identifying the physical bus numbers of each bus in

the computer system, a field identifying the logical bus number of each bus in said

computer system, and additional information such bus type (PCI peer, PCI bridge,

EISA, etc.), parent bus number, and parent bus slot number. Adamson also teaches

that during system start up, the current physical bus numbers assigned by the computer

system to the busses during system boot-up are compared to the physical bus numbers

contained within the bus mapping table to generate a logical-to-physical map table for

translating logical bus numbers to current physical bus numbers (see Fig.6 and column

3, lines 35-50). Therefore, at the time the invention was made, it would have been

obvious to one of ordinary skill in the art to modify the computer system wherein the

identifier is created for each bootable device from the host bridge number and the

identification data of the bootable device of Rekeita and Kondou by comparing the bus

number and device number with the slot value number as taught in Adamson. One of

ordinary skill in the art would have been motivated to modify the computer system

wherein the identifier is created for each bootable device from the host bridge number

and the identification data of the bootable device by comparing the bus number and

device number with the slot value number as taught in Adamson for generating the

logical-to-physical map table for translating logical bus numbers to current physical bus

numbers (see Adamson column 3, lines 45-50).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Grigory Gurshman
Examiner
Art Unit 2132

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